

*Final Ltr
Sent 7/28/2011*

July 28, 2011

Mr. Gary Lopez

(b) (6)

Dear Mr. Lopez:

Thank you for your letter and emails raising concerns about threats to drinking water supplies near the Barnstable Municipal Airport. I am writing to provide you with an update on results of our investigation and inquiries regarding this matter.

Among the concerns you raised is the possibility that contaminants from storm water run-off in two surface water ponds at the Airport – the Upper Gate and Lewis ponds – might be migrating from sediments in the ponds to the underlying aquifer. You also raised concerns about historical spills and plumes in the vicinity of the airport that might impact drinking water supplies, as well as the findings of a study by the Silent Spring Institute that included monitoring of nearby public water supply wells. In addition, you noted that *Cryptosporidium* at the airport has resulted in the need to disinfect groundwater wells. In light of these issues, you request that the Environmental Protection Agency review this matter pursuant to Section 1424(e) of the Safe Drinking Water Act and provide relief including preventing expenditure of federal funds at the airport facility, requiring closure of the ponds and requiring relocation of certain groundwater wells.

In response to your concerns, we have reviewed available environmental studies and monitoring data, including reports prepared by the Airport's consultants, the 2008 study by the Silent Spring Institute and the 2010 study by researchers at Boston University related to the nearby municipal wastewater treatment facility. In addition, we have reviewed three years of monitoring data conducted by the Hyannis Water System. EPA drinking water staff also met with MassDEP in Lakeville to better understand the water quality and treatment installed at the Maher wells and to review plans for remediation of spills in the vicinity of the Airport under the Massachusetts General Law chapter 21E hazardous waste site cleanup program. As is detailed further below, while our review to date does not support EPA taking action pursuant to Section 1424(e) of the Safe Drinking Water Act, we have recommended some additional investigations in an area of the airport near the Maher well field.

With regard to Upper Gate and Lewis ponds, our review of available reports indicates that any metals or polycyclic aromatic hydrocarbons (PAHs) – such as lead, pyrene and fluoranthene – in past discharges to the ponds would have been absorbed onto shallow pond sediments and thus are unlikely to migrate from sediments to the underlying aquifer. As you may already know, the Airport's consultant (Horsley & Witten) is conducting a further study of the ponds pursuant to the requirements of the Massachusetts 21E program, which should provide additional information about the water quality impacts, if any, from the ponds to the surrounding aquifer.

We also have reviewed the results of monitoring conducted by the Hyannis Water System over the last three years from its ground water supply. The data we reviewed showed that no levels of contaminants were detected in the finished water from any of the wells above applicable EPA drinking water standards. Sampling conducted in 2009 as part of the study by the Silent Spring Institute in three of the Hyannis Water Systems' wells and the distribution system detected two perfluorinated chemicals, PFOS and PFOA, for which EPA has health-based guidelines but not enforceable drinking water standards. Although both chemicals were detected at levels below EPA's health-based guidelines, we have recommended to MassDEP and the Cape Cod Commission that additional investigation of storm water

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discharges to underground injection wells may be warranted in an area of the Airport located near the Maher well field and identified as "Drainage Area M." The focus of such an effort would be to help identify the source of PFOS, PFOA and other emerging contaminants detected in water supply wells identified as part of the Silent Spring study.

Finally, with reference to your concerns about Cryptosporidium migrating from the airport to the public water supply wells, Cryptosporidium is a protozoa that can be expected to be found in surface water bodies, but is highly unlikely to be found in properly constructed and maintained groundwater wells. We found no evidence that this contaminant is in the public wells near the airport.

Thank you for bringing this matter to our attention. If you have further questions, please contact Kevin Reilly of the Drinking Water Quality & Protection Unit at 617-918-1694.

Sincerely,

Karen McGuire
Office of Environmental Stewardship
EPA Region 1
617-918-1711

Cc: Mr. David Terry, MassDEP
Mr. Jonathan Hobill, MassDEP
Mr. Tom Cambareri, Cape Cod Commission
Mr. Hans Keijser, Hyannis Water Supply Division
Mr. Mark Ells, Hyannis Department of Public Works



Re: Barnstable letter 
Marie Dicesare to: Karen McGuire
Cc: Jane Downing, Denise Springborg, Kevin Reilly

07/28/2011 12:55 PM

Hi Karen - as you requested - attached is copy of subject letter that will be put in today's mail.

Also, as you requested I am cc'ing Jane, Denise and Kevin.



newbarnstableletter.docx

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